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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,172	11/25/2000	Kia Silverbrook	NPS022US	3860

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SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER	
ABDULSELAM, ABBAS I	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/722,172	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	Abbas I Abdulselam	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see # 13, filed on 03/24/04, with respect to the rejection(s)of claim(s) 1-14 under U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ehrhart et al. (USPN 6304660) and Nagaoka (USPN 5564850).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-5, 7-8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (USPN 6152370) in view of Ehrhart et al. (USPN 6304660) and Nagaoka (USPN 5564850)

Regarding claim 1, Ackley teaches as shown in Fig. 1, a data collection symbology reader (50) including a light source (52), a sensor (54), a receiver or converter (56), processor and (60) and memory (57). See Fig. 1 Ackley discloses that the reader (50) is constructed to read and decode a bar code symbol (53) or "data collection symbols" formed as relief pattern on surfaces (col. 6, lines 1-3). Ackley defines "data collection symbols" to mean a symbol from any linear, stacked, area and other machine-readable symbology (col. 5, lines 34-39). Ackley

indicates that all elements in a given profile can be identified and subsequently decoded. See col. 3, lines 47-67 and col. 1-3. Ackley teaches that a processor (60) identifies portions of a large shape signal (received from a receiver) corresponding to resolved shapes and spaces, generates an unresolved element matrix in response to the large shape signal, and produces a signal indicative of the information encoded based on the unresolved element matrix. See col. 4, lines 39-45 Referring to Fig. 3, Ackley shows that the sensor (54) having an imaging lens (221) and an array of photo- detectors (222) producing a signal analogous to a reflectance profile (Fig. 4B). Ackley defines a profile to mean analog signal corresponding to a spatial representation of bars and spaces in a relief formed symbol. See col. 6, lines 37-59. In addition, Ackley's symbology reader (50) includes a sensor (54), which can be one or two-dimensional CCD, semiconductor array, vidicon or other area imager. See col. 5, lines 53-55.

However, Ackley does not teach generation of "region data indicative of the identity of the region using the coded data".

Ehrhart on the other hand teaches an apparatus including a material detection imaging assembly, which may detect material on a document by detecting transmissivity characteristics, or by sensing radiation emission characteristics of the document. Ehrhart teaches a controller of the apparatus that is in communication with a lookup table correlates ticket identification codes with indicators. For example, referring to Fig. 3.1, Ehrhart teaches a system (302) is adapted to capture images that can be processed to determine the regions in a play area of a game ticket in which scratch-off material has been removed (col. 9, lines 48-51). Ehrhart discloses a system (330) including scratch of material (331) of a game ticket (202-3-4) that is provided with an additive that emits radiant energy in a second band of wavelength when radiated by radiant

energy in a first band of wavelengths. Ehrhart illustrates that the system (330) is controlled by a processor-based control unit which controls a 1.times.N pixel array image sensor, and captures image data from image signals generated by sensor (334). Ehrhart adds that the controller also controls a transport mechanism for transporting a document across a field of view of sensor so that controller can construct 2D images from 1D "slice" image signals generated by sensor (334). Such a See Fig. 3-4, Fig. 3-5 and col. 11, lines 13-50.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ackley's symbology reader (50) to adapt Ehrhart's detection system (Fig 3.4) including the use of a sensor (334) and a surface (202-3-4) as configured in the Figure. One would have been motivated in view of the suggestion in Ehrhart that utilizing the sensor (334) along with the surface (202-3-4) can be equivalently used to generate "region data indicative of the identity of the region using the coded data". The use of a sensor (334) helps optically read lottery game tickets as taught by Ehrhart.

However, Ackley does not teach, "an attachment arrangement adapted to facilitate attachment and detachment of the device to and from a writing implement". Nagaoka on the other hand teaches writing instrument with an input member (2) for pressure-sensitive handwriting at one end, and a removable writing pen (4) on the opposite end of a cylindrical body. Nagaoka teach that a single cap (5) of a diameter being smaller than that of the cylindrical body (1) may cover either the writing pen or the input member See fig. 1

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ackley's coding and decoding system to adapt Nagaoka's input

pen with attached writing implement. One would have been motivated in view of the suggestion in Nagaoka that input pen with attached writing implement configured in Fig. 1 meets the desired feature of "attachment arrangement adapted to facilitate attachment and detachment of the device to and from a writing implement". The use of input pen with a writing implement helps form input system with a pressure sensitive handwriting as taught by Nagaoka.

Regarding claim 3, see Nagoaka's Fig. 1 (6), and Fig. 5 (6).

Regarding claims 4-5, see Nagoaka's Fig. 6 (4B).

Regarding claims 7-8, see Nagoaka's Fig. 1(4).

Regarding claim 13, Ackley teaches the use of data collection or bar symbol (53), which refers to a symbol from any linear, stacked, area and other machine-readable symbology. See col. 5, lines 34-46. It would have been obvious that "machine readable symbology" is a phrase wide enough to include tags as coded data.

Regarding claim 14, Ehrhart teaches a sensor (334), and a controller of the apparatus that is in communication with a lookup table correlates ticket identification codes with indicators. (see abstract)

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in view of Ehrhart et al, Nagaoka and in further view of Wilson et al. (USPN 5434370).

Regarding claim, 6, Ackley as modified does not teach a calibrator "for calibrating the device such that the information indicative of the distance between a writing portion of the

writing implement and the detector is incorporated in the region identity." Wilson on the other hand teaches calibration strips (22a, 22b, 22c 22d) for interacting with the laser beams for the purpose of providing reference end points from which to track (X, Y) movement of the implement (14), and to provide information regarding the position of the radiation relative to the writing surface. See col. 4, lines 43-49 and Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to further modify Ackley's modified symbology reader (50) system to include Wilson's use of calibration strips (22a, 22b, 22c, 22d) as shown in Fig. 1. One would have been motivated in view of the suggestion in Wilson that the calibration strips are functionally equivalent to the desired calibrator. The use of calibration strips helps function field responsive graphic data acquisition system (10) as a taught by Wilson et al.

4. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in Ehrhart et al, Nagaoka and in further view of Teufel et al. (USPN 6243503).

Regarding claim 9, Ackley as modified does not teach the "movement of data" defined as indicative of the sensing device's movement relative to the region. Teufel on the other hand teaches a motion detector unit (202) for recording the given position of the data acquisition device (200) relative to the image plane (20) and photodiodes (229, 230) intended for detecting the movement the data acquisition device. See col. 10, lines 13-19, 64-67, col. 11, lines 1-4, Fig. 17, (202), Fig 18B and Fig. 19(A-B).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ackley's modified method of decoding data collection symbols to further modify by adapting Teufel's motion detector (202) along with the use of photodiodes (229, 300). One would have been motivated in view of the suggestion in Teufel that the motion detector with photodiodes serve the same purpose and can be equivalently used to obtain the desired sensing device's movement and position relative to the surface. The use of motion detector and photodiodes helps function data acquisition device more effectively as taught by Teufel et al.

Regarding claim 10, Teufel teaches the process in which recognition and translation of handwritten information into electrically readable information takes place. See col. 11, lines 60-67 and col. 12, lines 1-2. Teufel discloses photodiodes (229, 229') on the one hand, and photodiodes (229', 229' ") on the other each detecting a signal from the line of alphanumerical characters.

Regarding claims 11-12, Teufel teaches that as the data acquisition device (200) moves parallel with a marked surface, a pattern of signals is produced in the diode array. Teufel further indicates that such a pattern along with suitable data processing means can be used to determine the direction and the speed of the motion of the reading device. It would have been obvious the same concept can be uses to determine the acceleration of the device.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 3-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-4, 7-11, 22-24 and 28-29 of U.S. Patent No. 6737591. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 1 of the present application is met by claims 1, 4 and 28-29 of the patent. It would have been obvious "attachment and detachment of the device" as used in the present application is equivalent and corresponds to a "housing", "a region identity sensor" and a "stylus or a pen" as used in claims 1, 4 and 29, respectively of the patent. It would have been obvious for one of ordinary skill in the art to ascertain that for a stylus or pen to be coupled and configured in the form of housing, it dictates some form of attaching/detaching mechanism.

Claims 3-5 and 7-8 of the present application are met by claim 29 of the patent.

Claim 6 of the present application is met by claim 11 of the patent.

Claims 9-10 of the present application are met by claim 7 of the patent.

Claim 11 of the present application is met by claim 22 of the patent.

Claim 12 of the present application is met by claim 23 of the patent.

Claim 13 of the present application is met by claim 8 of the patent.

Claim 14 of the present application is met by claim 24 of the patent.

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulselam** whose telephone number is **(703) 305-8591.** The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709.**

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulselam

Examiner

Art Unit 2674

June11, 2004

XIAO WU
PRIMARY EXAMINER